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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

# Office Action Summary

**Application No.**

10/581,944

**Applicant(s)**

YABUKI ET AL.

**Examiner**

Helene Klemanski

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/86)  
Paper No(s)/Mail Date 6/6/06 & 4/10/07
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9, the term "using" is indefinite. A "process" defined in the sole terms of "use of" does not define patentable subject matter under 35 USC 101. See *In re Fong*, 129 U.S.P.Q. 264 (CCPA 1961). The examiner suggests the term "utilizing" in place of the term "using" to overcome this rejection. See MPEP 2173.05(q).

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 and 19 of copending Application No. 11/631,942 (US 2008/0043078). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said copending claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 1-9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11, 22 and 24 of copending Application No. 11/632,653 (US 2008/0043079). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said copending claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1-5, 8 and 9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 6, 7, 9 and 11 of copending Application No. 10/714,945 (US 2004/0154496). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said copending claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 1-9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 4-9 of copending Application No. 10/576,941 (US 2007/0266890). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said copending claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claims 1-5, 8 and 9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2 and 4 of copending Application No. 10/578,229 (US 2007/0101899). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said copending claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claims 1-5, 8 and 9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2 and 12 of U.S. Patent No. 7,048,790. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said patent claims and would be obvious thereby.

10. Claims 1-5, 8 and 9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 6, 8 and 10 of U.S. Patent No. 7,211,133. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said patent claims and would be obvious thereby.

11. Claims 1-9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,267,715. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said patent claims and would be obvious thereby.

12. Claims 1-9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 and 15 of U.S. Patent No. 7,037,365. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said patent claims and would be obvious thereby.

13. Claims 1-5, 8 and 9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 12 and 13 of U.S. Patent No. 7,029,523. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said patent claims and would be obvious thereby.

14. Claims 1-5, 8 and 9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3, 6, 8-10, 13, 17 and 18 of U.S.

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Patent No. 7,303,272. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said patent claims and would be obvious thereby.

In the above references, it is the examiner's position that it would have been obvious to one having ordinary skill in the art that: (1) the water-soluble dye showing an absorption maximum at 440 to 540 nm would have a half-value width of 90 nm to 200 nm for a visible region absorption spectrum in water and (2) the water-soluble black dye has an aggregation property since the water-soluble dye having a  $\lambda_{\text{max}}$  of from 440 nm to 540 nm and the water-soluble black of the above references are the same structure as those disclosed by applicants in the specification and the claims.

### ***Claim Rejections - 35 USC § 102***

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

16. Claims 1-5, 8 and 9 are rejected under 35 U.S.C. 102(a) as being anticipated by

WO 2004/029166 US 7,303,272 is the English equivalent).

WO 2004/029166 teaches an inkjet black ink composition comprising an aqueous medium having dissolved therein at least a first dye of the formulas BL-1 and BL-2 (see Formulation of Black Ink Bk-101, Bk-201, Bk-301 and Bk-501) having a  $\lambda_{\text{max}}$  of 500-700nm and a half-value width of 100 nm or more in the absorption spectrum of a dilute solution standardized to an absorbance of 1.0 and at least a second dye of the formulas BS-1 and BS-2 (see Formulation of Black Ink Bk-101, Bk-201, Bk-301 and Bk-501) having a  $\lambda_{\text{max}}$  of 350-500nm. The second dye is added to enhance the color of the first dye. The at least first and second dyes are contained in the inkjet black ink in an amount of 0.2-20 wt%. WO 2004/029166 further teaches a process for printing comprising ejecting the above inkjet ink composition onto a substrate wherein the substrate comprises an image-receiving layer containing white inorganic pigment particles. See col. 1, line 66 – col. 2, line 5, col. 2, lines 51-62, col. 4, lines 14-44, col. 4, line 63 – col. 5, line 3, col. 5, line 53 – col. 6, line 3, col. 7, line 58 – col. 8, line 5, col. 31, lines 40-47 and lines 64-66, col. 48, line 34 - col. 49, line 21, Formulation of Black Ink Bk-101, Table 1, Formulation of Black Ink Bk-201, Table 3, Formulation of Black Ink Bk-301, Table 5, example 4, Table 7, Formulation of Black Ink Bk-501, Table 9, example 6, Table 11 and claims 1-3, 6, 8-10, 13, 17 and 18 of US 7,303,272. The inkjet black ink composition as taught by WO 2004/029166 appears to anticipate the present claims.

The only limitation in the claims not found by the examiner is the half-value width of 90 nm to 200 nm for a visible region absorption spectrum in water of the water-soluble dye and the aggregate property of the water-soluble black dye. However, these limitations are considered inherent because there does not appear to be any reason



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why the cited reference would not contain a water-soluble dye with applicants claimed half-value width or a water-soluble black dye with applicants claimed aggregation property since the water-soluble dye and the water-soluble black of the above reference are the same structure as those disclosed by applicants in the specification and the claims.

17. Claims 1-5, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 1420051.

EP 1420051 teaches an inkjet black ink composition comprising an aqueous medium having dissolved therein at least a first dye of the formula BL-1 (see Formulation of Black Ink Bk-101) having a  $\lambda_{\text{max}}$  of 500-700nm and a half-value width of 100 nm or more in the absorption spectrum of a dilute solution standardized to an absorbance of 1.0 and at least a second dye of the formula BS-1 (see Formulation of Black Ink Bk-101) having a  $\lambda_{\text{max}}$  of 350-500nm and a half-value width of above 90nm (see Table 32). The second dye is added to enhance the color of the first dye. The at least first and second dyes are contained in the inkjet black ink in an amount of 0.2-25 wt%. EP 1420051 further teaches a process for printing comprising ejecting the above inkjet ink composition onto a substrate wherein the substrate comprises an image-receiving layer containing white inorganic pigment particles. See paras. 0015-0017, para. 0101, para. 0160, paras. 0245-0248, Formulation of Black Ink Bk-101, Tables 31-32 and claims 1, 2, 6, 7, 9 and 11. The inkjet black ink composition as taught by EP 1420051 appears to anticipate the present claims.

The only limitation in the claims not found by the examiner is the aggregate property of the water-soluble black dye. However, this limitation is considered inherent because there does not appear to be any reason why the cited reference would not contain a water-soluble black dye with applicants claimed aggregate property since the water-soluble black dye of the reference is the same structure as those disclosed by applicants in the specification and the claims.

18. Claims 1-5, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2004/149558.

JP 2004/149558 teaches an inkjet black ink composition comprising an aqueous medium having dissolved therein at least a first dye of the formula BL-1 or BL-2 (see Formulation of Black Ink Bk-101) having a  $\lambda_{\text{max}}$  of 500-700nm and a half-value width of 100 nm or more in the absorption spectrum of a dilute solution standardized to an absorbance of 1.0 and at least a second dye of the formula BS-1 or BS-2 (see Formulation of Black Ink Bk-101) having a  $\lambda_{\text{max}}$  of 350-500nm. The second dye is added to enhance the color of the first dye. The at least first and second dyes are contained in the inkjet black ink in an amount of 0.2-25 wt%. JP 2004/149558 further teach a process for printing comprising ejecting the above inkjet ink composition onto a substrate wherein the substrate comprises an image-receiving layer containing white inorganic pigment particles. See pages 46-49, Formulation of Black Ink Bk-101 and Table 7. The inkjet black ink composition as taught by JP 2004/149558 appears to anticipate the present claims.

The only limitation in the claims not found by the examiner is the half-value width of 90 nm to 200 nm for a visible region absorption spectrum in water of the water-soluble dye and the aggregate property of the water-soluble black dye. However, these limitations are considered inherent because there does not appear to be any reason why the cited reference would not contain a water-soluble dye with applicants claimed half-value width or a water-soluble black dye with applicants claimed aggregation property since the water-soluble dye and the water-soluble black of the above reference are the same structure as those disclosed by applicants in the specification and the claims.

Applicants should note that the above reference has been considered to the extent that it was cited as an X reference in the search report on all the claims since there was no translation readily available.

19. Claims 1-5, 8 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi (US 2004/0154496)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Taguchi teaches an inkjet black ink composition comprising an aqueous medium having dissolved therein at least a first dye of the formula BL-1 (see Formulation of

Black Ink Bk-101) having a  $\lambda_{\text{max}}$  of 500-700nm and a half-value width of 100 nm or more in the absorption spectrum of a dilute solution standardized to an absorbance of 1.0 and at least a second dye of the formula BS-1 (see Formulation of Black Ink Bk-101) having a  $\lambda_{\text{max}}$  of 350-500nm and a half-value width of above 90nm (see Table 32). The second dye is added to enhance the color of the first dye. The at least first and second dyes are contained in the inkjet black ink in an amount of 0.2-25 wt%. Taguchi further teaches a process for printing comprising ejecting the above inkjet ink composition onto a substrate wherein the substrate comprises an image-receiving layer containing white inorganic pigment particles. See para. 0015, para. 0017, paras. 0028-0029, para. 0035, paras. 0039-0040, paras. 0129-0134, para. 0208, paras. 0295-0296, Formulation of Black Ink Bk-101, Tables 31-32 and claims 1, 2, 6, 7, 9 and 11. The inkjet black ink composition as taught by Taguchi appears to anticipate the present claims.

The only limitation in the claims not found by the examiner is the aggregate property of the water-soluble black dye. However, this limitation is considered inherent because there does not appear to be any reason why the cited reference would not contain a water-soluble black dye with applicants claimed aggregate property since the water-soluble black dye of the reference is the same structure as those disclosed by applicants in the specification and the claims.

20. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi et al. (US 2007/0266890)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Taguchi et al. teach an inkjet black ink composition comprising an aqueous medium having dissolved therein at least a first dye of the formula Bk-1 (see Formulation of Black Ink in para. 0550) or a mixture of formula BK-1 and the dyes of formulas A-E wherein the first dye has a  $\lambda_{\text{max}}$  of 500-700nm and a half-value width of 100 nm or more in the absorption spectrum of a dilute solution standardized to an absorbance of 1.0 and at least a second dye of the formula Bk-2 (see Formulation of Black Ink in para. 0050) having a  $\lambda_{\text{max}}$  of 350-500nm. The second dye is added to enhance the color of the first dye. The at least first and second dyes are contained in the inkjet black ink in an amount of 0.2-20 wt%. Taguchi et al. further teach a process for printing comprising ejecting the above inkjet ink composition onto a substrate wherein the substrate comprises an image-receiving layer containing white inorganic pigment particles. See paras. 0024-0034, para. 0066, paras. 0074-0075, para. 0113, paras. 0117-0120, paras. 0216-0219, compounds TS-1 thru TS-4, paras. 0473-0474, Formulation of Black Ink in para. 0550, Table 8, Formulation of Black Ink in para. 0566, Table 10, Formulation of Black Ink in para. 0583, Formulation of Black Ink in para. 0604

and claims 4-9. The inkjet black ink composition as taught by Taguchi et al. appears to anticipate the present claims.

The only limitation in the claims not found by the examiner is the half-value width of 90 nm to 200 nm for a visible region absorption spectrum in water of the water-soluble dye and the aggregate property of the water-soluble black dye. However, these limitations are considered inherent because there does not appear to be any reason why the cited reference would not contain a water-soluble dye with applicants claimed half-value width or a water-soluble black dye with applicants claimed aggregation property since the water-soluble dye and the water-soluble black of the above reference are the same structure as those disclosed by applicants in the specification and the claims.

Applicants should note that the 102(e) date for this reference is the international filing date since the WIPO publication of the IA (WO 2005/040292-copy supplied by the examiner) is in English and designated the US.

21. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.
22. Claims 1-5, 8 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi et al. (US 2007/0101899)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome

either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Taguchi et al. teach an inkjet black ink composition comprising an aqueous medium having dissolved therein at least a first dye of the formula Bk-1 (see Formulation of Black Ink Bk-101) having a  $\lambda_{\text{max}}$  of 500-700nm and a half-value width of 100 nm or more in the absorption spectrum of a dilute solution standardized to an absorbance of 1.0 and at least a second dye of the formula Bk-2 (see Formulation of Black Ink Bk-101) having a  $\lambda_{\text{max}}$  of 350-500nm. The second dye is added to enhance the color of the first dye. The at least first and second dyes are contained in the inkjet black ink in an amount of 0.2-25 wt%. Taguchi et al. further teach a process for printing comprising ejecting the above inkjet ink composition onto a substrate wherein the substrate comprises an image-receiving layer containing white inorganic pigment particles. See paras. 0016-0022, paras. 0060-0061, para. 0071, paras. 0095-0096, paras. 0171-0175, paras. 0305-0308, Formulation of Black Ink Bk-101, para. 0350 and claims 1, 2 and 4. The inkjet black ink composition as taught by Taguchi et al. appears to anticipate the present claims.

The only limitation in the claims not found by the examiner is the half-value width of 90 nm to 200 nm for a visible region absorption spectrum in water of the water-soluble dye and the aggregate property of the water-soluble black dye. However, these limitations are considered inherent because there does not appear to be any reason why the cited reference would not contain a water-soluble dye with applicants claimed

half-value width or a water-soluble black dye with applicants claimed aggregation property since the water-soluble dye and the water-soluble black of the above reference are the same structure as those disclosed by applicants in the specification and the claims.

Applicants should note that the 102(e) date for this reference is the international filing date since the WIPO publication of the IA (WO 2005/040652-copy supplied by the examiner) is in English and designated the US.

23. Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

24. Claims 1-5, 8 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi et al. (US 7,048,790)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Taguchi et al. teach an inkjet black ink composition comprising an aqueous medium having dissolved therein at least a first dye of the formula BL-1 or BL-2 (see Formulation of Black Ink Bk-101) having a  $\lambda_{\text{max}}$  of 500-700nm and a half-value width of 100 nm or more in the absorption spectrum of a dilute solution standardized to an



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absorbance of 1.0 and at least a second dye of the formula BS-1 or BS-2 (see Formulation of Black Ink Bk-101) having a  $\lambda_{\text{max}}$  of 350-500nm. The second dye is added to enhance the color of the first dye. The at least first and second dyes are contained in the inkjet black ink in an amount of 0.2-25 wt%. Taguchi et al. further teach a process for printing comprising ejecting the above inkjet ink composition onto a substrate wherein the substrate comprises an image-receiving layer containing white inorganic pigment particles. See col. 2, lines 44-66, col. 4, lines 21-52, col. 5, lines 22-40, col. 6, lines 46-58, col. 29, line 59 - col. 30, line 67, col. 31, lines 6-19, col. 44, lines 39-62, Formulation of Black Ink Bk-101, Table 7 and claims 1, 2 and 12. The inkjet black ink composition as taught by Taguchi et al. appears to anticipate the present claims.

The only limitation in the claims not found by the examiner is the half-value width of 90 nm to 200 nm for a visible region absorption spectrum in water of the water-soluble dye and the aggregate property of the water-soluble black dye. However, these limitations are considered inherent because there does not appear to be any reason why the cited reference would not contain a water-soluble dye with applicants claimed half-value width or a water-soluble black dye with applicants claimed aggregation property since the water-soluble dye and the water-soluble black of the above reference are the same structure as those disclosed by applicants in the specification and the claims.

25. Claims 1-5, 8 and 9 rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi (US 7,211,133)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Taguchi teaches an inkjet black ink composition comprising an aqueous medium having dissolved therein at least a first dye of the formula BL-1 (see Formulation of Black Ink Bk-101) having a  $\lambda_{\text{max}}$  of 500-700nm and a half-value width of 100 nm or more in the absorption spectrum of a dilute solution standardized to an absorbance of 1.0 and at least a second dye of the formula BS-1 (see Formulation of Black Ink Bk-101) having a  $\lambda_{\text{max}}$  of 350-500nm and a half-value width of above 90nm (see Table 32). The second dye is added to enhance the color of the first dye. The at least first and second dyes are contained in the inkjet black ink in an amount of 0.2-25 wt%. Taguchi further teaches a process for printing comprising ejecting the above inkjet ink composition onto a substrate wherein the substrate comprises an image-receiving layer containing white inorganic pigment particles. See col. 2, lines 44-59, col. 5, lines 7-15, col. 6, lines 9-33, col. 7, line 55 – col. 8, line 2, col. 99, lines 1-5, col. 111, lines 43-67, Formulation of Black Ink Bk-101, Tables 31-32 and claims 1, 5, 6, 8 and 10. The inkjet black ink composition as taught by Taguchi appears to anticipate the present claims.

The only limitation in the claims not found by the examiner is the aggregate property of the water-soluble black dye. However, this limitation is considered inherent

because there does not appear to be any reason why the cited reference would not contain a water-soluble black dye with applicants claimed aggregate property since the water-soluble black dye of the reference is the same structure as those disclosed by applicants in the specification and the claims.

26. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi et al. (US 7,267,715)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Taguchi et al. teach an inkjet black ink composition comprising an aqueous medium having dissolved therein at least a first dye of the formula Bk-1 (see the Black Ink in Ink Set 101) having a  $\lambda_{\text{max}}$  of 500-700nm and a half-value width of 100 nm or more in the absorption spectrum of a dilute solution standardized to an absorbance of 1.0 and at least a second dye of the formula Bk-2 (see the Black Ink in Ink Set 101) having a  $\lambda_{\text{max}}$  of 350-500nm. The second dye is added to enhance the color of the first dye. The at least first and second dyes are contained in the inkjet black ink in an amount of 0.2-20 wt%. Taguchi et al. further teach a process for printing comprising ejecting the above inkjet ink composition onto a substrate wherein the substrate comprises an image-receiving layer containing white inorganic pigment particles. See

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col. 1, line 56 – col. 2, line 10, col. 3, lines 46-53, col. 5, lines 3-38, col. 117, lines 37-53, col. 119, lines 10-18, col. 141, lines 6-11, col. 155, line 49 - col. 156, line 7, Table 1; the Black Ink in Ink Set 101, Table 2; the Black Inks in Ink Sets 105-110 and claim 1. The inkjet black ink composition as taught by Taguchi et al. appears to anticipate the present claims.

The only limitation in the claims not found by the examiner is the half-value width of 90 nm to 200 nm for a visible region absorption spectrum in water of the water-soluble dye and the aggregate property of the water-soluble black dye. However, these limitations are considered inherent because there does not appear to be any reason why the cited reference would not contain a water-soluble dye with applicants claimed half-value width or a water-soluble black dye with applicants claimed aggregation property since the water-soluble dye and the water-soluble black of the above reference are the same structure as those disclosed by applicants in the specification and the claims.

27. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi et al. (US 7,037,365)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Taguchi et al. teach an inkjet black ink composition comprising an aqueous medium having dissolved therein at least a first dye of the formulas T-5, T-6 and/or T-7 (see the Black Ink in Table A) having a  $\lambda_{\text{max}}$  of 500-700nm and a half-value width of 100 nm or more in the absorption spectrum of a dilute solution standardized to an absorbance of 1.0 and at least a second dye of the formula T-3 (see the Black Ink in Table A) having a  $\lambda_{\text{max}}$  of 350-500nm. The second dye is added to enhance the color of the first dye. The at least first and second dyes are contained in the inkjet black ink in an amount of 0.2-2 wt%. Taguchi et al. further teach a process for printing comprising ejecting the above inkjet ink composition onto a substrate wherein the substrate comprises an image-receiving layer containing white inorganic pigment particles. See col. 2, line 44 - col. 3, line 24, col. 6, lines 34-47, col. 29, lines 40-58, col. 116, lines 14-16, Table 31, col. 154, line 28 - col. 155, line 6, example 1, the Black Ink in Table A, Table B, and claims 1-3 and 15. The inkjet black ink composition as taught by Taguchi et al. appears to anticipate the present claims.

The only limitation in the claims not found by the examiner is the half-value width of 90 nm to 200 nm for a visible region absorption spectrum in water of the water-soluble dye and the aggregate property of the water-soluble black dye. However, these limitations are considered inherent because there does not appear to be any reason why the cited reference would not contain a water-soluble dye with applicants claimed half-value width or a water-soluble black dye with applicants claimed aggregation property since the water-soluble dye and the water-soluble black of the above reference

are the same structure as those disclosed by applicants in the specification and the claims.

28. Claims 1-5, 8 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi et al. (US 7,029,523)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Taguchi et al. teach an inkjet black ink composition comprising an aqueous medium having dissolved therein at least a first dye of the formulas BL-1 and BL-2 (see Composition of Black Ink Bk-101) having a  $\lambda_{\text{max}}$  of 500-700nm and a half-value width of 100 nm or more in the absorption spectrum of a dilute solution standardized to an absorbance of 1.0 and at least a second dye of the formulas BS-1 and BS-2 (see Composition of Black Ink Bk-101) having a  $\lambda_{\text{max}}$  of 350-500nm. The second dye is added to enhance the color of the first dye. The at least first and second dyes are contained in the inkjet black ink in an amount of 0.2-25 wt%. Taguchi et al. further teach a process for printing comprising ejecting the above inkjet ink composition onto a substrate wherein the substrate comprises an image-receiving layer containing white inorganic pigment particles. See col. 2, lines 30-54, col. 4, lines 5-23, col. 5, lines 8-24, col. 29, lines 40-62, col. 30, lines 35-40, col. 43, line 54 – col. 44, line 10, Composition

of Black Ink Bk-101, col. 51, lines 66-67, Table 7 and claims 1, 2, 12 and 13. The inkjet black ink composition as taught by Taguchi et al. appears to anticipate the present claims.

The only limitation in the claims not found by the examiner is the half-value width of 90 nm to 200 nm for a visible region absorption spectrum in water of the water-soluble dye and the aggregate property of the water-soluble black dye. However, these limitations are considered inherent because there does not appear to be any reason why the cited reference would not contain a water-soluble dye with applicants claimed half-value width or a water-soluble black dye with applicants claimed aggregation property since the water-soluble dye and the water-soluble black of the above reference are the same structure as those disclosed by applicants in the specification and the claims.

### ***Conclusion***

The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Klemanski whose telephone number is (571) 272-1370. The examiner can normally be reached on Monday-Friday 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Helene Klemanski/  
Primary Examiner, Art Unit 1793